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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,202	12/20/2001	Alex Hornig	HORN3080/EM	6050

7590 03/25/2003
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EXAMINER

PHAM, LEDA T

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 03/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/022,202	Applicant(s) HORNG ET AL.	
	Examiner Leda T. Pham	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract uses claim language "comprises" on line 2 page 11. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 1, 7 are objected to because of the following informalities: on line 13 of claim 1 inserts —the bottom of — between "plural plates mounted to" and "the bobbin". On line 16 of page 9 in claim 7 inserts —the bottom of — between "plural plates mounted to" and "the bobbin".

Appropriate correction is required.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 - 4, 7 - 9 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,441,531 B1 in view of U.S. Patent No. 6,512,320 B2.

In claim 1 of Patent No. 6,441,531 B1, Horng teaches a stator having a bobbin including a winding wound therearound, an one upper pole plate assembly comprising at least two upper pole plates stacked to the upper side of the bobbin, each said upper pole plate including a plurality of radial poles, a magnetic pole face projecting from each said radial pole of each said upper pole plate and extending along a direction parallel to a longitudinal direction of the upper pole plate, the magnetic pole faces of each said upper pole plate forming an overall upper magnetic pole face of the upper pole plate assembly; and a lower pole plate assembly comprising at least two lower pole plates stacked to the lower side of the bobbin, each said lower pole plate including a plurality of radial poles, a magnetic pole face projecting from each said radial pole of each said lower pole plate and extending along a direction parallel to a longitudinal direction of the lower pole plate, the magnetic pole faces of each said lower pole plate forming an overall lower magnetic pole face of the lower pole plate assembly. The claim language in this reference is not exactly identically word by word but the scope of claim is the same at the present claim, except for claim 1 of Patent No. 6,441,531 B1 does not disclose the axle tube extending through the bobbin and said plural pole plates, the axle tube conducting magnetic flux created by the winding to said plural pole plates.

However, in U.S. Patent No. 6,512,320 B2, Horng did have a axle tube extending through the bobbin and said plural pole plates (figure 3), therefore this is not a new thought in his invention for claim in a new invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1- 2, 7 - 8 rejected under 35 U.S.C. 102(b) as being anticipated by Horng (U.S. Patent No. 4,987,331).

Horng teaches 1 a stator (figure 1) comprising a bobbin having an axial winding wound therearound (11); plural pole plates (2, 3) each having a pole end, each said pole end having a pole face (the extension portion of pole plates 2, 3), and an axle tube (5) extending through the bobbin and said plural pole plates, the axle tube conducting magnetic flux created by the winding to said plural pole plates; a half of said plural pole plates being mounted on top of the bobbin and another half of said plural pole plates being mounted to a bottom of the bobbin, the number of the half of said plural pole plates mounted on top of the bobbin being not less than two, the number of the half of said plural plates mounted to the bobbin being not less than two, thereby increasing magnetization, reducing magnetic flux leakage, and gaining effective guided overall magnetic flux by means of increasing an overall thickness for effectively conducting the magnetic flux to said plural pole plates.

Referring to claim 2, Horng teaches the stator wherein there are two pole plates mounted to each of the top and the bottom of the bobbin to thereby form a stator having four poles (figure 1).

Referring to claim 7, Horng teaches the stator comprising a bobbin having an axial winding wound therearound (11); plural pole plates each having two diametrically disposed pole ends (2, 3), each said pole end having a pole face; and, an axle tube (5) extending through the bobbin and said plural pole plates, the axle tube conducting magnetic flux created by the winding to said plural pole plates; a half of said plural pole plates being mounted on top of the bobbin and another half of said plural pole plates being mounted to a bottom of the bobbin, the number of the half of said plural pole plates mounted on top of the bobbin being not less than two, the number of the half of said plural plates mounted to the bobbin being not less than two, thereby increasing magnetization, reducing magnetic flux leakage, and gaining effective guided overall magnetic flux by means of increasing an overall thickness for effectively conducting the magnetic flux to said plural pole plates (figure 1).

Referring to claim 8, Horng teaches the stator wherein there are two pole plates mounted to each of the top and the bottom of the bobbin to thereby form a stator having eight poles (figure 1).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horng.

Referring to claim 3, Horng teaches the stator having two pole plates mounted to each of the top and the bottom of the bobbin while claim 3 recites the stator with three pole plates. An artisan would have the necessary mechanical skills to configure increasing the number of the pole plates. Doing so would increase the thickness of the pole plate assembly. Thus, it would have been obvious to one skill in the art at the time the invention was made to modify the number of the pole plates mounted to each of the top and the bottom of the bobbin, as recited in the above claim. Doing so would increase the magnetization by the thickness of pole plate assembly.

10. Claims 4 – 6, and 9 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng in view of Hsieh (U.S. Patent No. 6,270,325 B1).

Referring to claim 4 and claim 9, Horng teaches the claim invention except for the pole face of each of said plural pole plates extends along a plane perpendicular to a general plane of the respective pole plate.

Hsieh teaches a stator having the pole face of each of said plural pole plates extends along a plane perpendicular to a general plane of the respective pole plate (21, 23, figure 1) for securing a coil inside.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify Horng's stator pole face as taught by Hsieh. Doing so would secure the stator coil.

Referring to claim 5 and claim 10, Hsieh teaches the stator wherein the pole face of each of said plural pole plates includes an inclined side (figure 1).

Referring to claim 6 and claim 11, Hsieh teaches the stator wherein the pole face of each of said plural pole plates is a trapezoid (figure 1).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leda T. Pham whose telephone number is (703) 305-4864. The examiner can normally be reached on M-F (7:30-5:00) first Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9176 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

Leda T. Pham
Examiner
Art Unit 2834

LP
March 23, 2003

Graham M. Corbridge
2834